Music Technology Discipline Construction in Guangdong, China

Qiang Chen*Wasin Phrompitakkul*

School of Management, Shinawatra University.*

Abstract

The article was investigated and studied representative universities in Guangdong from the perspective of discipline construction. The content involved three major aspects: the construction of academic teams, the scientific research and personnel training activities, and the environment and conditions of disciplinary activities. Accordingly, this article had aimed on the survey and analysis of the professional construction, curriculum construction, hardware construction, and faculty construction of music science disciplines in Guangdong colleges and universities. It is expected to provide industry practitioners and relevant decision makers with a panoramic survey report on the development of the discipline, provide theoretical support and strategic recommendations for the development of the discipline, and make due contributions to the development of the discipline in Guangdong and even China.

Keywords: Music Technology, Discipline Construction, Personnel Training
Environment Disciplinary, Conditions Disciplinary

1. Introduction

At the end of the 1980s, the concepts of music technology related subjects entered China for the first time. After more than thirty years of development, this subject area has gradually transformed from the initial experimental research within the scope of universities to the popularization and development of the whole society. Although China's music technology has developed rapidly in technology application and research and development over the past three decades, and has a certain social foundation, no matter its advanced level or social popularity, it has developed well with countries such as Europe, America and Japan. There is still a certain gap between regions. Colleges and universities are the main force for the development of scientific

research and the cradle of talent training. It is well known that Guangdong is the leader of China's reform and opening up. Leading the direction and trend of social and economic development, but also an important vane for the development of science and technology. In summary, the development and popularization of music science disciplines can improve the level of music discipline construction in colleges and universities, thereby promoting the level of music education for all people.

2. Research Questions

2.1 Is the discipline construction perfect and reasonable?

2.2 Is the discipline construction sustainable?

3. Conceptual Framework

This research aims to discuss the current status of the discipline construction of music science and technology in Guangdong universities.
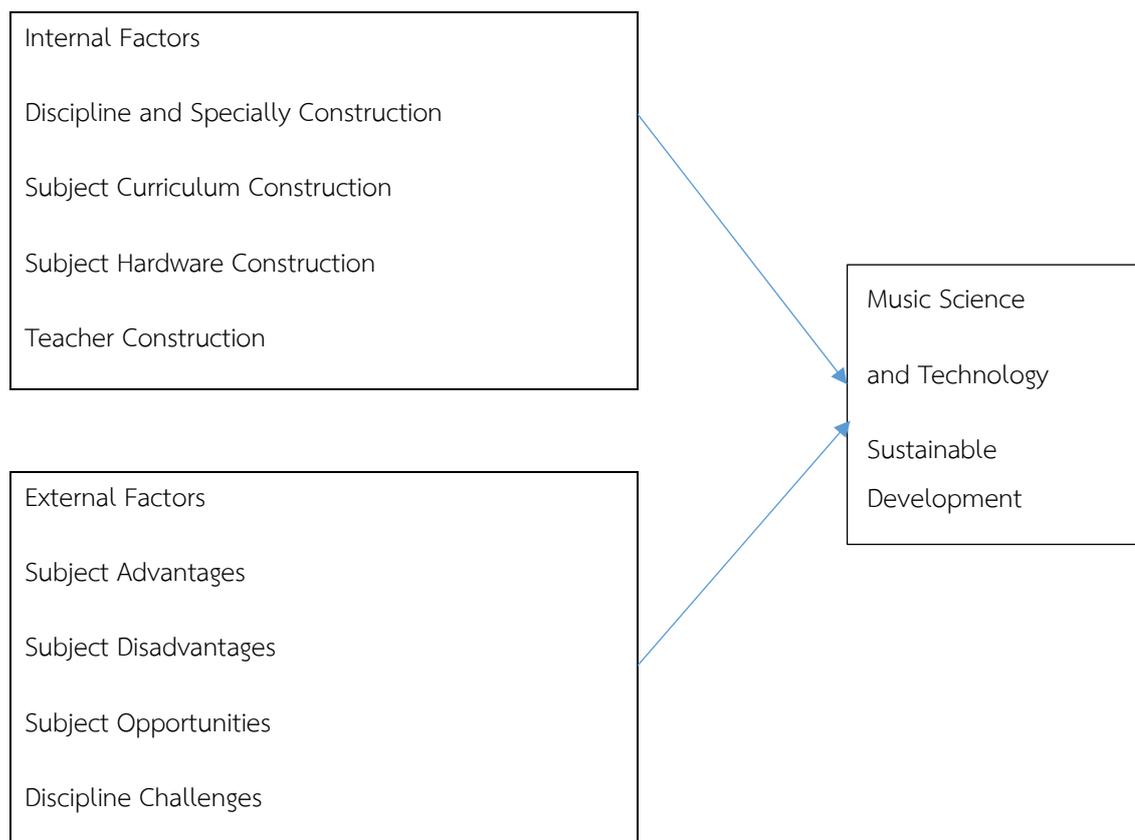

Figure 1 Conceptual Framework

4. Literature Review

4.1 An overview of the development of music technology in the world Music technology was born in Europe and America at the end of the century and the beginning of the century. With the continuous experimentation and exploration of musicians and scientists, new technologies, new equipment and new music creation concepts have been continuously invented and created, and electronic music has emerged. In universities, while music technology-related research continues to develop, music technology-related education also gradually develops. Education related to music technology started abroad in the 1960s, and has now formed a relatively complete scale and system.

4.2 An overview of the development of music technology in China In the early 1980s, various electronic musical instruments and electronic music equipment that followed the reform and opening up also entered the country, opening a brand new world for domestic music activities. The development process of music technology in China can be roughly divided into two parts: from the 1980s to the 1990s, electronic music has just entered China, and it is also the experimental development stage of electronic music in China. The research focus at this stage is mainly on the principle of computer sound The research and application of, so we can mainly use the subject term of electronic music to define induction.

4.3 The development of music technology in Guangdong university in China The development of music science and technology in universities needs to meet the needs of the times, the needs of society, and the development of disciplines demand. Can the current status of music science disciplines in Guangdong universities meet these needs? Sadly, He said that although the subject has been developed in China for more than two decades, the research done by its predecessors has undoubtedly laid the foundation for the development of the music technology subject, but from the research results and literature so far.

5. Research Methodology

5.1 Research Design Since the current research focuses on the internal and external factors that affect the construction of music science and technology disciplines in colleges and universities in Guangdong, the data and information from

the original data sources are crucial. The author needs extensive and profound information from these sources. Therefore, in order to meet the requirements of the breadth and depth of the data, the author designs the current research as questionnaire survey, in-depth interview method, literature research and many other research methods to obtain data, which includes:

5.2 Population, Sample, and Sampling This article will conduct an on-site visit survey of 8 representative colleges and conduct in-depth interviews with 17 teachers and experts related to the music science discipline, with a view to obtaining first-hand survey data and forward-looking sustainable development planning Strategy.

5.3 Data Collecting Method The questionnaire will use IOC test to test reliability and validity. Then, in-depth interviews were used to collect data on the external factors of subject development based on SWOT theory from 17 subject experts, and draw strategic recommendations for sustainable development.

6. Research Results and Discussion

6.1 Descriptive Analysis Survey scope and survey purpose In order to understand the development status of music science and technology education disciplines in Guangdong colleges and universities, this article will survey representative universities in Guangdong. According to statistics, there are 33 music majors among 184 universities in Guangdong, distributed in Guangdong Province.5 cities. For the list of specific institutions, please refer to the post-text references (Institution website: Music Admissions Information of Guangdong Universities), this survey is targeted at eight typical universities. Within the scope of this survey, this article will investigate from the perspective of discipline construction to understand the progress of teaching and research in music science and technology in colleges and universities. . Specifically, this survey will focus on the following aspects:

(1) The construction of the school's music technology-related majors, including: Professional or professional setting; degree provided; Professional or professional direction training target setting; Curriculum construction in the professional or professional direction; Research status; Students' employment direction and employment status;

(2) The construction of the school's music technology-related courses, including: Course construction, course system construction; The object of the course; Specific teaching content arrangement, use of teaching materials, etc.

(3) The construction of the school's music technology related hardware, including:Construction of research centers, teaching and research offices, laboratories,

(4) The construction of the school's music technology teachers, including: The number of teachers;The main source of teachers;The main tasks etc.

This survey will conduct in-depth interviews with 17 experts and scholars in music science disciplines in Guangdong Province. From the perspective of experts and SWOT analysis, we will conduct interviews from the aspects of "opportunities", "challenges", "advantages" and "disadvantages" in the development of the disciplines. Disciplinary sustainable development planning and strategic advice. Survey content and survey method Based on the above survey purpose, first of all, the author designed a questionnaire for the survey object. The questionnaire contains questions related to discipline construction. As a first-hand information of the college information survey, according to this questionnaire, the author will first learn the basic information through the college's official website, and then on this basis, contact by email and telephone Experts from related institutions understand further details and obtain detailed and accurate information to obtain complete and reliable samples of basic information. Then, through in-depth interviews, interviewed 17 representative experts in the province to understand the situation of the construction of music science and technology in higher teachers' colleges in their eyes, the opportunities and challenges they face, and their advantages and disadvantages in development.

6.2 Statistical Analysis of Survey Data Professional construction: The survey started from May 2020 and basically ended in October 2020, which lasted six months. It is planned to distribute 200 questionnaires to 8 colleges and universities within the scope of the survey. So far, there are 6 basic and comprehensive data collections, and there are 2 colleges that have obtained comprehensive and detailed information due to problems with the college webpage, insufficient information and information, and the opportunity to obtain interviews or telephone interviews with relevant teachers. Curriculum construction: Computer music creation courses are the most frequently

offered courses. On the basis of the teaching content of basic theory courses or production courses, the creation courses have added a teaching part that integrates with composition technology. Students should not only learn to use sequencer software when studying this course For simple music production, it is also necessary to be able to use relevant technologies to create music after basic knowledge of hardware, software, recording, and sampling. Audio technology processing and recording courses are music technology courses and are also offered in Guangdong colleges and universities. But unlike music science basic knowledge courses and creation courses, audio technology processing

The teaching content of recording courses is relatively professional, and the technical requirements for students in music technology are also higher. Therefore, they are mostly set up in universities with computer music majors or professional directions. In contrast, the teaching emphasis of the courses under this category is also divided more carefully. Hardware construction: Through the investigation of the hardware facilities involved in the teaching and research of computer music in Guangdong colleges and universities, we can understand that the common hardware facilities in the current teaching research are: multimedia classrooms for traditional music theory multimedia teaching, piano collective lessons and impromptu accompaniment classes Multimedia digital piano classroom, computer music classroom for teaching computer music basic theory courses, computer music laboratory for computer music production or creative advanced courses and practice, and recording studio for audio technology processing or advanced recording courses, etc. Construction of teaching staff: Through the survey of teachers of music science and technology in Guangdong colleges and universities, it can be found that the among the colleges and universities in the industry or course, except the professional college Xing Hai Conservatory of Music, there are 7 teachers of music technology. The number of professional teachers of music technology in other colleges is usually one to three, with an average of less than 2.25 per institution. These teachers not only undertake the teaching work of multiple courses, but some teachers also undertake the work of teaching materials compilation and school performance programming. According to a survey, the average number of university teachers offering music technology-related courses in the United States is 4-5 per school. In comparison, the serious shortage of teachers in music science and technology in universities in China has become a very significant problem. In addition,

according to the statistics of teachers 'professional background, it is found that the source of teachers of music technology courses in Guangdong colleges and universities is usually divided into the following two parts. The main force of Guangdong music technology teachers as a whole; the second type is teachers of composition, and then learn related knowledge of music technology through self-study or study abroad and study tours, taking into account music technology courses other than composition. There are also a handful of teachers from science and engineering backgrounds. Their professional abilities and knowledge structure are fundamentally different from those graduated from music colleges. Therefore, in the future, they may become the backbone of the development of music science as a cross-disciplinary cipline. Summary of in-depth interview views:

Opportunities

(1) The construction of the Guangdong-Hong Kong-Macao Greater Bay Area will bring a series of policy support for cultural education and opportunities for cultural exchange with Hong Kong and Macao.

(2) The vigorous development of Guangdong's culture-related industries has brought about a large number of music technology professional job requirements, providing a stronger industrial foundation for the development of disciplines.

(3) Increasing horizontal cooperation in music disciplines between Guangdong universities and colleges provides more communication platforms for the development of disciplines.

Challenge

(1) In the era of the network economy, the technological innovation capabilities of economically developed provinces such as Zhejiang and Jiangsu have challenged Guangdong, and the competition in the same industry has become increasingly fierce.

(2) Guangdong's education base has a certain gap compared with other strong education provinces in the country, and there is a certain gap between the talent reserve and comprehensive talent literacy compared with other strong education provinces.

(3) The local music culture in Guangdong has been affected by the erosion of Cantonese culture, and gradually declined. The development space is facing challenges.

(4) The lack of high-end talents who favor technology in music technology talents has led to the slow or even stagnation of music technology majors such as music artificial intelligence.

Advantage

(1) As an emerging discipline, the development momentum is rapid, the employment situation is good, and the development prospect of the discipline is bright.

(2) The subject background is highly market-oriented, closely connected with music-related industries, and has broad development space.

Disadvantages

The popularization of disciplines in colleges and universities in Guangdong is far from enough, which is inconsistent with the popularity of the society, the lack of communication with other disciplines, and the lack of a broad mass base.

In Guangdong colleges and universities, the degree of attention to music science and technology is still not enough, the investment of funds is limited, and the talent reserve is lacking.

The subject lacks a certain theoretical support, and the development of related tutorials and teaching aids is lacking.

The links between subject practitioners in various universities are very limited and there is a lack of communication. It is urgent to establish relevant academic organizations to enhance academic exchanges and cooperation.

6.3 Follow-up Research and Development

The investigation and research lacks refinement in breadth and depth: The examination of discipline construction is a large and complicated work not only contains a lot of data, but also involves multiple aspects. Affected by the epidemic,

investigate as far as the aspects that can be considered and involved, as well as the inevitable omission of data, the author, as a teacher of music technology, will continue to pay attention to the development of the subject and do a good job of supplement and update. Due to the limitation of time and space, the third chapter of the paper improves the curriculum system and develops social education. the three proposals for cultivating and building an exchange platform have not been fully implemented. In the follow-up research, we will do further inspection and analysis.

Conduct research on music technology teaching and business cooperation:

Cooperation between industry and academia will become an important force to promote the sustainable development of China's music technology industry in the future. Cooperation between research institutes of the university and the government and commercial institutions can promote Interaction and mutual influence, common development, and form a good system. According to the survey, Guangdong colleges and universities have cooperated with many well-known enterprises in the music industry, such as Zhejiang Piano Group, Net ease Cloud Music, Ten cent Games and other teaching cooperation projects. Although some data in this respect were collected in this survey, due to space limitations and different research priorities, no analysis and statement were carried out in the paper. I hope to have the opportunity to do further in-depth discussion and research. Current status and future development of Internet-based music technology distance education:Internet-based distance education is a new type of education that has emerged with the development of modern information technology. Today, online education has covered every province, autonomous region, and municipality directly under the Central Government, but in the field of art education in Guangdong, only Xing Hai Conservatory of Continuing Education has formed a relatively complete scale and system. As a typical step ahead, the Xing Hai Conservatory of Music's distance education program can be used as a reference for further development of distance music education in Guangdong in the future. The investigation in this article also has a certain impact on the distance music education of music technology. Also due to the length and the question of the research point, it has not been fully discussed in the article. The author believes that the distance education of music science and technology through the Internet will be an irresistible trend in the future, and it is an important research field that cannot be

ignored. Therefore, if there is still a chance, I hope to do further investigation and research in this regard.

References

Li Xiang. (2014). **The Construction and Development of Electronic Music in the Educational System of Chinese and Western Colleges.** Central of Music, Beijing.

Liu Chuanbo. (2012). **The Development and Teaching Present Situation of Music Specialty in colleges and universities in China.** Northeast Normal University, Jilin.

She Xiuyin. (2019). **Research on the Development of Internet Music Based on 4PS Theory-Taking Haidie Music Co., Ltd.** as an Example. Harbin Normal University, Harbin.

Shen Miaomiao. (2018). **Survey and Research on Computer Music Production Courses in Xi'an Area.** Shaanxi Normal University, Shaanxi.

Xu Delei. (2017). **A Comparative Study on the History of Chinese and Korean Electronic Music Creation and Educational Development.** Shandong University, Shandong.

Yu Miaoxi. (2012). **Survey and Thinking of Computer Music Education in Higher Normal Colleges from the Perspective of Discipline Construction.** Nanjing Normal University, Nanjing.

Zhang Xiaofu (2012). **Carding and Evaluating the Development of Chinese Electronic Music.** Art Review, No.4, 22-23.